April, 1955

THE CHEMIST

VOLUME XXXII NUMBER 4

DR. M. C. WHITAKER, F.A.I.C.
Receives Honorary AIC Membership
(See page 125)

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Award of the New England Chapter Honor Scroll to Kenneth E. Bell

The Common Chemist, By Kenneth E. Bell

Human Problems of the Research Director, C. A. Stokes.

Presentation of the Ohio Award to Dr. W. J. Wohlleben, F.A.I.C.

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TO COME IN MAY

(Lack of space required the omission of several departments in this issue of THE CHEMIST, as well as the article promised last month. These will appear in the May issue.)

"For every one of you who have made the grade, there are thirty to fifty others who at best are only partial successes," stated Kenneth E. Bell when he received the Honor Scroll of the New England Chapter. "These others should be accorded a place of honor for their contribution to the strength of our industrial organizations" What can be done to aid and encourage these essential men, and how rewarding is the result, is revealed in Mr. Bell's article, "The Common Chemist." • "Advice on the Submission of Inventions and Ideas to Large Corporations," will also be published, together with items about members, news, and Chapter activities.

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THIRTY-SECOND ANNUAL MEETING PROGRAM

The American Institute of Chemists

May 11, 12, 13, 1955

LA SALLE HOTEL **CHICAGO, ILLINOIS**

The central theme of the Thirty-second Annual Meeting of the Institute concerns the all-important ability to work effectively with people. Success in the chemical profession requires skill in handling the boss, management, research workers, salesmen, commercial development specialists, consultants, technical writers, and job applicants. The speakers will provide a new look at these human operations.

Wednesday, May 11th

(For National Council and Annual Meeting Committees)

5:00 P.M. The President's Reception to the Officers, National Councilors, Members of the Annual Meeting Committees, and their wives. (La Salle Room)

6:00 P.M. Dinner Meeting of the Board of Directors and Council. (Madison Room)

Note: For wives of National Officers, National Councilors, and Annual Meeting Committee Members, a special event will be arranged.

Thursday, May 12th

9:00 A.M. Registration (19th Floor.)

Pre-registration

AIC Members	$3.00
Non-Members	5.00
Students	1.00

Registration At Door

AIC Members	$5.00
Non-Members	6.00
Students	1.00

(There is no registration fee for wives of registrants.)

9:00 A.M. Coffee Hour (19th Floor) No charge.

10:00 A.M. Annual AIC Business Meeting (Century Room)

NOTICE

The Thirty-second Annual Business Meeting of the American Institute of Chemists will be held at the LaSalle Hotel, Chicago, Illinois, at 10:00 A.M., on Thursday, May 12, 1955, for announcement of the election of councilors, and for such other business as may be properly presented.

—LLOYD VAN DOREN, Secretary.

AGENDA

Report of the President, Dr. D. B. Keyes
Report of the Chairman of the Board, Dr. L. T. Work
Report of the Treasurer, Dr. F. A. Hessel
Report of the Secretary, Dr. L. Van Doren
Reports of the Committees
Reports of the Chapters
Announcement of the election of councilors
Old Business
New Business
Presentation of Honorary AIC Membership to Dr. C. S. Marvel.

12:15 P.M. Informal Luncheon (Ballroom) Tickets $3.50.
Chairman: Dr. Lloyd A. Hall, Chairman, Chicago AIC Chapter.
Speaker: Virgil K. Rowland, Detroit Edison Company.
Subject: "People in Management".

2:00- 5:00 P.M. First Professional Session (Century Room)

WORKING WITH PEOPLE

2:00 P.M. Chairman: Dr. R. C. Newton, Vice President Research & Development, Swift & Company.

2:15 P.M. "Working with Salesmen," J. Warren Kinsman, Vice President, E. I. du Pont de Nemours & Co.

2:45 P.M. "Motivation of Production People," Mark Putnam, Executive Vice President, Dow Chemical Company.

3:15 P.M. "Evaluating Commercial Chemical Development Effort," Dr. Thomas H. Vaughn, Vice President, Colgate-Palmolive Company.

3:45 P.M. "The Chemist and Management," Dr. Clifford F. Rassweiler, Vice Chairman of the Board, Johns-Manville.

4:15 P.M. "Controlling the Controller," W. I. McNeill, Management Consultant (Former Vice President and Controller for General Aniline & Film Corp.).

5:00 P.M. Social Hour (Ballroom and Century Room).

6:00 P.M. Gold Medal Banquet (Grand Ballroom) Tickets $5.25.
Toastmaster: Dr. Donald B. Keyes, President, The American Institute of Chemists.
Speaker for the Medalist: Dr. W. H. Lycan, Vice President and Director, Johnson & Johnson.
Presentation of the Gold Medal: Dr. Foster D. Snell, Chairman, Jury of Medal Award, AIC.
Medal Acceptance Address: Dr. Carl S. Marvel, Research Professor of Organic Chemistry, University of Illinois. "Some Experiences with Students in Chemistry."

FOR THE LADIES

For the ladies, a four and one-half hour tour is planned for Thursday, May 12, from 10:30 A.M. to 3:00 P.M. The tour includes a visit to the "Food for Life" and other exhibits at the Museum of Science and Industry. Luncheon will be served at the Museum, compliments of Swift and Company. Price of tour $1.75.

Friday, May 13th

9:00 A.M. Registration—continued (19th Floor).
Coffee One-half Hour (19th Floor) No charge.

9:30-12:00 A.M. Second Professional Session (Century Room).

WORKING WITH PEOPLE

9:30 A.M. Chairman: Dr. Ray P. Dinsmore, Vice President Research and Development, Goodyear Tire & Rubber Company.

9:45 A.M. "Sizing Up New Members for the Team," Dr. George L. Royer, Administrative Assistant to the General Manager, Research Division, American Cyanamid Company.

10:15 A.M. "Utilizing Consultants", Dr. Paul W. Bachman, Vice President, The Davison Chemical Corporation.

10:45 A.M. "Mishandling Research People," Dr. Warren C. Lothrop, Vice President, Arthur D. Little, Inc.

11:15 A.M. "Working with Technical Writers," David H. Killeffer, Consultant, 168 Westchester Ave., Tuckahoe 7, N. Y.

12:00 P.M. Cocktails. Courtesy of International Minerals & Chemical Corporation.

12:15 P.M. Honor Recipients' Luncheon (Grand Ballroom) Tickets $3.50.

Toastmaster: Dr. Gustav Egloff, "Introduction."

Announcement of Honorary Membership Awards for the coming year: Dr. Sidney D. Kirkpatrick, Chairman, Committee on Honorary Membership.

Speaker for Honorary Membership Recipient: John H. Nair, Assistant Director of Research, Thomas J. Lipton, Inc.

Presentation of Honorary Membership to Dr. Paul D. V. Manning, by AIC President D. B. Keyes.

Address: "The Chemist and His Personality," Dr. Paul D. V. Manning, Vice President Research and Development, International Minerals & Chemical Corporation.

PLEASE NOTE

Non-members are invited to register and to attend sessions and social activities at the Annual Meeting.

It is important that advance registration be received, so that adequate accommodations can be provided. Your tickets will not be mailed to you, but will be held in your name at the Registration Desk for you to receive on the day of the meeting.

Please send your reservations, for all the events you wish to attend, on the attached form, before May first. Your money will be returned, if cancellations are received by May 6, 1955.

Dress for the Medal Banquet is optional.

Please make all checks payable to The American Institute of Chemists.

Reservations for hotel rooms should be sent directly to the LaSalle Hotel, LaSalle & Madison, Chicago, Ill.

For your convenience, a reservation form for the Annual Meeting is printed on page 36.

Annual Meeting Committees

Honorary Chairman, Dr. Gustav Egloff, Universal Oil Products Co., 30 Algonquin Road, Des Plaines, Illinois

General Chairman, Dr. Roy C. Newton, Swift & Co., Union Stock Yards, Chicago 9, Ill.

Chairman of Program Committee, Dr. Ray P. Dinsmore, The Goodyear Tire and Rubber Co., 1144 E. Market St., Akron 16, Ohio

Co-chairman of Program Committee, Dr. Bernard S. Friedman, Sinclair Refining Co., Sinclair Res. Labs, Inc., 400 E. Sibley, Harvey, Ill.

Chairman of Arrangements, Edward L. Gordy, Standard Oil Co., 910 S. Michigan Ave., Chicago 80, Ill.

Treasurer, Dr. Herman S. Bloch, Universal Oil Products Co., (Drawer C.), Riverside, Illinois

Ladies Committee, Mrs. Lloyd A. Hall *Chairman,* Mrs. B. S. Friedman, Mrs. H. S. Bloch

Registration Committee: Dr. Waldersee Hendry, Hendrey Chemical Co., 1535 N. Dayton St., Chicago, Ill.
Herman F. Schwarz, Sherwin-Williams Co., 116th St. & Champlain Ave., Chicago 28, Ill.

Chairman of Publicity, Frank C. Byrnes, Chemical Week, 520 North Michigan Ave., Chicago, Ill.

Chairman, Chicago AIC Chapter, Dr. Lloyd A. Hall, Griffith Laboratories, Inc., 1415 W. 37th St., Chicago 9, Ill.

Acquired: Major interest in the Index Chemical Co., Houston, Texas, by Pennsylvania Salt Manufacturing Co., Philadelphia 7, Pa.

ACHEMA XI: Chemical Engineering Exhibition and Congress, to be held at Frankfurt a. Main, Germany, May 14-22, 1955. Over 750 manufacturers from twelve countries will display their products. For information: Chicago Section, American Chemical Society, 86 E. Randolph St., Chicago 1, Ill.

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EDITORIAL

Fifty Thousand Chickens and Our Annual Meeting

Dr. D. B. Keyes

President, The American Institute of Chemists, Inc.

MANY years ago when we were very young, an ingenious chap invented a system ("Philo") which, it was claimed, when followed would permit anyone to raise ten hens in the back yard with remarkable egg-production results. The "master mind," presumably the head of the household, did the brain work required and the children supplied the labor. In those days we had never heard of "juvenile delinquents"; children were just too busy to become delinquent.

The story goes that some professional person, perhaps a chemist, became so proficient using this system that he attracted the attention of the owner of 50,000 chickens. He was lured away from his profession, made general manager of this "poultry ranch" with a fancy salary, given a real expert to help him, and asked to merely duplicate the egg-laying rate with the 50,000 that he had achieved with the ten.

Yes, you have guessed the outcome — he returned to his former profession after five years of hard work and futile endeavor; the "poultry ranch" owner sold out and no doubt placed his money where the risk was not so great. Evidently chickens like people perform as individuals and are not subject to mass analysis. (See recent comments by our Editor.)

Speakers at our Annual Meeting, whose experience *in toto* must be in excess of 250 man-years, will tell us how to work with and handle people, *but* will they go beyond the "Ten in the Backyard"?

Why not attend the meeting and find out!

Annual Conference: For Engineers, May 6, 1955, at the Ohio State University, Columbus, Ohio. Speakers include John C. Sharp, president of Hotpoint Co., and Gen. Curtis E. LeMay, Commanding General of the Strategic Air Command, U.S.A.F. For information. Associate Dean Harold A. Bolz, College of Engineering, Ohio State University.

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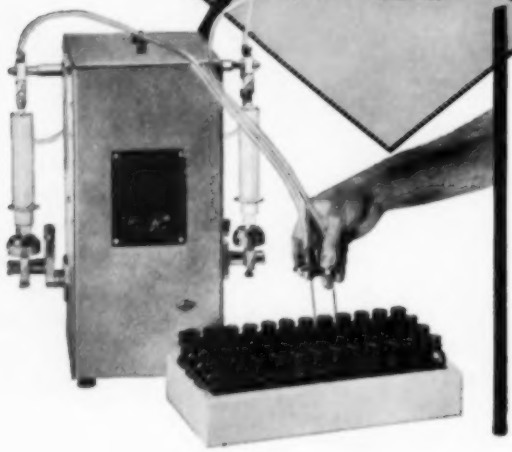

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Watch Your Step

Dr. M. C. Whitaker, Hon. AIC

Retired Vice President & Consultant, American Cyanamid Company

(Excerpts from acceptance address when the author was presented with Honorary AIC Membership, Jan. 20, 1955, in New York, N.Y.)

ABOUT a quarter of a century ago, when our life pattern was being taken over and planned for us by others, it was decreed that everyone who had a job would have to retire at the age of sixy-five. I felt that such a rule would not apply to people in the chemical profession, because obviously it takes the better part of sixty-five years to acquire the training, experience, and seasoning to enable us to do our best work in our field. It simply does not make sense for chemists to retire just at the time they reach the peak of their usefulness.

Just what chemists were supposed to do after they retire — and keep alive is still a mystery to me. Few of us have been able to find time to develop the golf habit, or acquire enough money to become yachtsmen. As a group we are conspicuously shy on diverse interests, amusements, and, may I add, vices. However, after running some ten years beyond the mandatory quitting date and finding a way by which I might retire and continue to work, I began to think about retirement. I could see several advantages, such as fifteen minutes more time in the morning to dress, eat breakfast, and read something besides the headlines in the morning paper. Besides, after listening to gripes for over half a century, I wanted to pass this tedious job to younger men in the organization, and reserve a chance to do some griping on my own account. I wanted time to figure out what there could be in the life and work of the chemist that would make him want to retire at sixty-five. . . .

The Future of the Chemical Industry

. . . My mission will be accomplished if I succeed in catalyzing your confidence in the unlimited opportunities which are clearly indicated for the future of the chemical industry and profession. At the same time I would like to point out some things which are now harassing your efforts and which, unless controlled, may destroy your work.

The chemical industry has come a long way in the past fifty years, and you who elected to do your life work in this field have risen to the dignity of an outstanding profession, destined to dominate all others.

In the beginning of this period, your industry was small, crudely developed, and unimportant economically; and chemists, to the lay mind,

were indistinguishable from druggists. At that time the chemist naturally had an inferioriy complex when he thought public appreciation, bankers, investors, and the big moguls of business were ignoring him—and he was right.

His professional status, as compared to lawyers, doctors, and other engineers was just about zero. How, fifty years ago, a student could make up his mind to enter the chemical industry, is difficult to explain. He may have had the vision to see what was going to or ought to happen, or he may have been looking for a challenging opportunity for his peculiar talent and training, or he may have played a subconscious hunch. Whatever the reason, he must now realize that when he entered the chemical industry, he got aboard a fast-moving craft, loaded with opportunities unlimited.

When one looks thoughtfully at the modern chemical plant and its equipment, he is amazed at the amount and quality of engineering talent that has been poured into these operations. When one sees the thousands of new products that these plants produce, his admiration for the research chemist is unlimited. The public, the banker, and the investor now know and admire chemists and engineers and our industry, and back up their admiration with money. All other industries now turn to us for help. . .

No industry or profession has greater right to be proud of its achievements, than we who make up the chemical industry; but we should never forget that this is only the beginning and that the field is full of prospect for future development. We can visualize better prospects than those which lay before us fifty years ago. We still have the problems of synthesizing new and useful products such as starch, sugar, oils, protein, etc., as simply, easily, and cheaply as is now done by plant life. Many of our natural resources will reach the vanishing point sooner or later and will have to be replaced by synthetic products made by the chemical route. Our money for investment is being used up at such a rapid rate that we will soon be forced to find processes cheaper to install and operate. It takes an investment of $38,000 to make a job for one person in the chemical industry, and less than half that in any other industry, so this problem of reducing investment cost is here now.

Our manpower, both technical and non-technical, already drawn down to the danger point, will have to be conserved. Even the increasing cost of power is already demanding attention. Conservation, or even curtailment, of power is a big problem. All these things point to the crying need for more scientific facts from research, more and better engineering vision, and the highest type of forward-looking philosophy on which to base our future growth.

So long as the leaders of chemical industry, knowing what it has now achieved, are willing and able to support vision and invention in fields where the need is actual or potential, I can see no limit to our progress. I am, however, deeply concerned about some of the termites which are gnawing at the foundation of all of our industrial structures.

But Watch Your Step

Now that the chemical industry is attracting great public attention, is integrating itself with other industrial fields and contributing in a large way to their growth, and has become a top wealth-producer, it is confronted with the necessity of Watching Its Step. As a matter of our own self-preservation, it will have to be protected against envy, greed, the invasion of its rights, and its exploitation by self-seekers who have not contributed, and never will contribute, one single idea to its development or one single dime to its support.

People in our field tend to be "lone eagles" in their industrial policies, their thinking, and their public relations. This is a natural outgrowth of their early training and experience. The industry, in its early development, was small, poor, misunderstood, and accordingly ignored by all laymen and most other professionals. Chemical people got in the habit of rolling their own, minding their own business, financing themselves. They concentrated on their own immediate problems. They expected no help from others — and they received none.

I suggest that now and then you pause long enough to take a look at some of the things which have already happened, others which have been attempted, and still others that have been invented. These are all things that cramp the progress, change the form, or threaten to destroy the great industrial structure which the technical talent of this country, including your own, has built. It is not sufficient to give these problems the brush-off by saying. "It can't happen to us," or to just bellyache about them and do nothing. Some of these devices are already working and others are sure to follow.

The aim of education is, or should be, to teach people to think clearly and straight. That is just what education in science does. You study, observe, and prove the facts, rate them according to their importance, draw your conclusions from these facts; then you visualize the application of your findings to your problem.

I would like to diversify your thinking and suggest the application of the talents you have developed by education and experience to some of the problems that now exist, or will in future arise, which threaten from the outside the industry that repre-

sents your livelihood and your life's work.

Some of the important factors gnawing at the foundations of our industry to which I would direct your attention are summarized as follows:

1. *Attacks on Our Patent System*:

This group knows the contributions which our patent system has made to our industrial progress and the incentive which it has created for the individual. A patent on a new invention offers each of us the same incentive that gold or uranium holds for the prospector. To the industry, it is a measure of protection for the enormous expenditures now being made for research. . . Yet in spite of its demonstrated success, our patent system is all too frequently a target for the chiselers. A continuous pressure is being applied by some elements of our population to narrow, limit, break down, or completely destroy this scheme which rewards the pioneer and the inventor for the new building blocks necessary to advance our civilization.

2. *The Attacks on the Size and the Efficiency of Our Industrial Organization*:

Our great industrial organizations have been developed with the greatest care and intelligence to function in the most efficient manner and to produce their products and services at the lowest possible cost, all directed to receiving customer approval, without which no business can live. Today they are always subject to real or threatened attack. The apparent reasons are their size, or the fact that their competition in the market, in spite of its advantages to the consumer, is felt by their own inefficient competitors. This is a good example of the backward influence exerted by small pressure groups endeavoring to enforce inefficiency, rather than to learn new ideas and adopt new methods, and become efficient on their own account.

3. *Discriminatory Laws*:

Laws favoring a minority group at the expense of a majority are now plentiful and increasing. Many of these, favoring the farmer, labor, veterans, are familiar to you. The principle that all citizens in our country have equal rights is being brushed aside, and substituted for it are a bunch of "fix-it" laws, inspired by a political motive and backed by highly vocal minority groups who want to get ahead the easy way.

4. *Government Control or Domination*:

Reasonable regulation of our industries is perhaps necessary, but why government control and complete domination? The taking-over of an industry is more imminent than you may think. An excuse is all that is needed to have Government control slapped on your industry. Sometimes a court decision will serve the purpose, as in a recent one placing the 400 independent producers of natural gas under Federal control.

During World War II a series of bills were introduced into Congress directed to taking over and placing under Government control all technology, research and development, and to disseminate the knowledge which private industry was alleged to be witholding. The chemical industry would, of course, have been the keystone to that bureaucratic arch. It was proposed to appoint a director of this enterprise, and one of the bills suggested that the then vice president of the United States was qualified and would be eligible for this job. Such a bill might have been passed, if the war had not ended at the right time. A lot of people favored it, including, presumably, the vice president.

Even in peacetime all the people in the chemical industry have to do to reopen the case of government control is to make some world-shaking discovery or invention. Our friends who began to push the atom around did just that and you are all familiar with what happened to them.

It would be a safe bet that if Faraday had made the discoveries which laid the foundation for the electrical power industry in this day, and someone had visualized the great industrial structure which would flow from those discoveries, all of his inventions would have been put under Government control. We all shudder to think where the great power industry would have been today if Faraday's research and the development based upon it had been taken over and directed by some master mind who achieved his appointment by belonging to the right political party.

5. *Destructive Tax Laws*:

. . . I would like to discuss some of the tax devices which have been erected upon an innocent-looking grant, made by the people to the Federal Government, in which the people agreed to submit to a tax upon their income. This evolution is, as you know, based upon a Constitutional Amendment which was approved and put into effect in 1913.

As you know, some tax laws have been passed by the approved legislative processes; others, in the form of so-called regulations, have been made by authority delegated to Government bureaus; and some by court decisions. I will refresh your memory by quoting the 16th Amendment to the Constitution:

> "Congress shall have the power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several states, and without regard to any census or enumeration."

You will recognize that this amendment is a grant of power by the people, who own that power, to Government. You will note that this is a grant of power to tax income only; that no definition is included as to the purpose or scope of the grant or what the tax money is to be used for; that no limitation whatever is placed upon the amount of

your income that can be taken as tax (the take is now up to only 87 per cent of top incomes); that nothing is said, as might be expected, for or against uniformity of taxation for all people.

In short, the grant of power in this Amendment is a complete unconditional surrender of control over your income, and by virtue of that control, over your personal rights, your professional success, and your property. This grant transfers to others the right to all or even more than all, by indirect methods, of your earnings, and the right to spend it for any purpose.

You will note that this is the first, and now the only, provision in our Constitution giving Government, without limitation, power to control the destiny of the individual. The very purpose of constitutions, and particularly our own, is to protect the rights of the people against encroachment by Government. The 16th Amendment reverses all of that.

To be sure, we later granted the Government power to police the drinking and social habits of the people; to interfere with the liberties of the individual in order to try a great social experiment. Fortunately, that grant was withdrawn after a few years of dismal failure so that now the only grant of power to encroach upon the rights and property of the people resides in the 16th Amendment.

If there ever was a time when the people of this country should have had their own lawyers at their elbows, it was when this contract with Government was being made. Your attorney would have put in the conditions, definitions, and limitations required to safeguard his client's interests, just as he does in any ordinary contract or deed of gift.

Let us look at what is actually being done under this open-ended grant of power, made without any definitions or limitations:

(1) Your income can be taxed without limitation (it is now up to only 87 per cent);
(2) Some people are taxed at a higher rate than others;
(3) Prosperous or successful people are leveled down by taxes;
(4) The income of people who work is taken away by taxes and given to others who had nothing to do with earning it;
(5) Business income is taxed as well as the income of the individual who owns the business; thus the earnings from your investments are taxed twice;
(6) The income of our citizens is taxed to create huge "give-away" and "do-good" programs to give money to foreigners (only $131-billion to date);
(7) Retirement pensions and insurance benefits are taxed;
(8) The capital gains on your savings are taxed;
(9) Home owners are taxed to ultimate liquidation by the indirect method of refusing to allow depreciation and obsolescence on their homes and equipment;
(10) Your income is taxed to buy up perishable farm products in order to support prices — and let the products perish;
(11) Taxes are imposed to prevent inflation — when, in fact, they do exactly the opposite;
(12) Excise Taxes, tailor-made to support the Income Tax Take while you are alive, are levied

on your property when you die (up to 77 per cent); or, if you give it to your children, a Gift Tax must be paid (up to 57 per cent).

A great new discovery appeared in the 1930's. This discovery was made not by scientists or producers, as might be expected, but by laymen who had a great flair for organization and management. What could be a more enticing job than to organize and take over people's income and/or capital and spend it for them? Apparently, we were not earning our income and spending it in the approved way, so we would have to be shown. Who was in a better position to show us than this group who were neutral because they were not producers of income, and they would be entirely impartial because the money they spent did not belong to them?

There was only one "missing link" in this super-brilliant conception, and that was quickly solved by the well known process of merger. The law-makers had to be brought into the picture to provide ways and means to get the money — lots of money— so the planners and spenders would be relieved of worry while they did their work. The law-makers saw no problem in their part of the job because they had an unlimited grant of power directly from the people, in the 16th Amendment.

How well did this new set-up work? Last fiscal year the tax take was almost 70-billion dollars, and the spenders spent a few billion more than that. This means that every man, woman, and child in the United States has had to dig up or borrow, or have someone do it for him, $430 to support the spenders' programs. Not bad for a 24-year old enterprise!

What can be done about this grant of power which is running wild and which, if allowed to go uncontrolled, will ruin our industry, our profession, and ultimately our nation? There are three things we can do:

(1) We can break up this partnership between law-makers and spenders by exercising our right to elect law-makers who will represent the interests of all the people and this country, instead of the interests of the spenders. We can hammer down, if possible, this drunken sailor type of spending — but that is not a good lead. The only way to stop the spenders is for the law-makers, who are supposed to be looking out for our interests, to shut off the "give-away" money — both tax money and borrowed money.

(2) We can exercise our right to amend the Constitution by repealing the 16th Amendment and thereby eliminate this grant of unlimited power to confiscate our earnings and our savings. Twenty-seven states have already petitioned for a chance to do just that. If five more states, or 32 of the 48 states, join in this movement, the people will have their

chance to correct this great 40-year old blunder.

(3) Now no one can deny a Government the right to some form of taxation to meet the legitimate and necessary expenses. Therefore, we should have a chance to draft a new Amendment to the Constitution which will define and limit, in unmistakable language that everybody can understand, the tax power that is being granted.

No educated man or woman who has a stake in a job, a bank account, real or potential, or a business, can afford to ignore the plans of the planners, or the groups who have a flair for organizing and managing somebody's else's business, or those who want a free share of your prosperity.

All of us in this great chemical industry, and the profession which creates and supports it, should be able to see by now that queer and varied devices are gnawing at our foundations. Every one of these proposals should receive the chemical treatment. They should be stripped of their camouflage, their slogans designed to deceive, and their alleged good intentions. They should be broken down and analyzed the way any chemist would treat an unknown substance. On the basis of your analysis, you can draw your own conclusions as to what each proposal will really accomplish, how it will work if put into practice, and to what extent it can be distorted or diverted into unrelated uses. . .

Our great industry, our nation needs, in these uncertain times, men like you, men trained in the scientific methods and habits of thought. I have touched but briefly on some of the political aspects of the present situation. You can think of others—industrial, educational, legal, social — that require clear thinking and courageous action. As a nation we are bedeviled by visionaries and pressure groups, working like bees to further their misguided ends. These influences are a threat to each of us. They cannot be suppressed by law — that never works. Their schemes must not be ignored. They must be analyzed, their structure determined and exposed, so that everybody may see what the plan really is.

Who, by training, experience and daily practice, can be better qualified to do such a job than the men and women who are educated to, and do, think?

AWARDED: A $15,000 grant to Rutgers University, for dental research, by Colgate-Palmolive Co.

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Introduction of Dr. Whitaker

Dr. R. C. Swain, F.A.I.C.

Vice President, American Cyanamid Co., 30 Rockefeller Plaza, New York 20, N.Y.

(Presented when Honorary AIC Membership was conferred on Dr. Whitaker, Jan. 20, 1955, New York, N.Y.)

In January, 1923, when the Perkin Medal was presented to Dr. M. C. Whitaker, Arthur D. Little, one of the principal speakers, said, "Chemistry can only realize the potentialities of her estate through the coordinated efforts of workers of many types and with diversified endowments. Some must be patient and persistent garners of facts and gleaners of details. Some must be students and thinkers, others must be teachers and expounders. As a student, teacher, and editor, Milton C. Whitaker has won high place in our esteem, but tonight it is primarily for his position and achievements as an organizer and a doer that we are met to honor him."

For most ordinary human beings, these comments, made more than thirty years ago, might well have been accepted as the culmination of a distinguished and successful career. However, Dr. Whitaker since that time has accomplished so much, entered so many new fields, and displayed such vigor and enthusiasm that, in retrospect, we can now see it was only the beginning.

Yet this previous appraisal is still valid for the ability to get things done and it remains one of Dr. Whitaker's outstanding characteristics. It results from the complex combination of energy and initiative, intellectual curiosity, dissatisfaction with the *status quo,* diversity of interests and abilities, and a never-ending interest in beginnings and unsolved problems rather then past accomplishments.

Dr. Whitaker's "broad spectrum" interests have ranged from rare metals, textiles, and principles of combustion during his years with the Welsbach Co., to acetylene, gas manufacture, distillation, cracking of hydrocarbons, paper pulp, rosin, and coal hydrogenation while at Columbia; to fermentation, alcohols, esters and ethers, ethylene, and liquid fuels at U.S.I.; and more recently to the development of a whole host of new organic compounds, useful in hundreds of industries, in the laboratories of the American Cyanamid Company.

On this occasion, we honor Dr. Whitaker most for his impact on the profession of chemistry and chemical engineering, and on the thousands of people who have benefitted from knowing or working with him.

THE AMERICAN INSTITUTE OF CHEMISTS has as one of its major objectives the advancement of the professional status of the chemist, and it reserves its major honors for those who have purposely or involuntarily influenced the profession. Often it is by an exemplary career that this influence is felt. In general, however, it is the combination of accomplishments, personality and individual professional stature that is weighed to determine a man's contributions to the profession. On these counts, Dr. Whitaker has more than filled the requirements.

Born of Buckeye parents in the little town of Frazeyburg, Ohio, he was one of the three sons of Reuben and Jennie Magruder Whitaker. His father was a veteran of the Civil War, having served as lieutenant in the 51st Ohio Volunteers for over four years. Milton, his first son, was born a few years after the war ended. The families of both parents had migrated from Virginia and trace back to English ancestry on the father's side; Scotch on the mother's. This heritage resulted in an indomitable fighting spirit that has been all his life, whether it involved solving a knotty problem, rectifying unsatisfactory situations, bucking bureaucratic red tape or defeating unwarranted opposition. A friend has noted that "there were doubtless boys in Frazeyburg who tried to lick Milton, but history records that none did."

This period saw the early development of another characteristic of Dr. Whitaker, the ability to size up a problem quickly, and then do something constructive about it. At age seven, Milton was entrusted by his mother with the care of his younger brother while she went shopping. The brother soon became a first-class nuisance, as he insisted on disrupting Milton's efforts to take the family Singer sewing machine apart to find out how it worked. Milton quickly solved this problem by placing his brother in the center of the room, stretching his clothes a little, and nailing them to the floor.

The family migrated to Colorado when Dr. Whitaker was ten years old. His brother Fred describes their life there as "nomadic." They moved from one lumber camp to another along the southwestern section of the border of Colorado and New Mexico as the stands of trees became exhausted. His formal, elementary schooling was subject to many interruptions and was obtained for the most part in country schools of one room with one teacher. But he had learned much of the technical side of the sawmill and lumber business by the time he left home (1887) to enter secondary school at Boulder. He was mature beyond his years when he graduated from the Colorado State Preparatory School at age twenty.

During vacations, Milton had

kept busy at the sawmills. Following graduation, he spent the next four years as a mechanic and millwright, during which time he not only designed but supervised the erection of several large saw mills. This primitive out-of-door life did much to develop the rugged constitution of the young man; it perhaps explains the origin of some of the picturesque and unusually expressive language for which he is famous.

Working hard came naturally to Dr. Whitaker. His brother Orvil has said that like most of the early settlers of the West, it took a lot of hard work to make a living and survive, but with the courageous backing of a wonderful father and mother, the family carried on in the hope of better things. "No sacrifice or effort is too great if made for the purpose of obtaining knowledge and an education" was the parental admonition. So Milton eventually entered the University of Colorado, undaunted by the fact that he was already twenty-four years old. He received the B.S. degree in 1898.

How did Dr. Whitaker happen to choose chemistry? Professor Chandler, whose assistant Whitaker was for a period of three years at the turn of the century, ascribed it to the influence of Prof. Charles S. Palmer. Prof. Palmer, a Johns Hopkins Ph.D and head of the Chemistry Department at the University of Colorado, had just returned from a year of study with Ostwald at Leipzig when Milton entered as a freshman at Boulder, Colorado. This inspiring teacher undoubtedly turned the trick of making a chemist out of him, but we have irrefutable evidence that his interest in chemistry dated back to his early youth. It is related that he liked to make up solutions, especially colored ones, when he was a boy and to show his playmates not only how to dissolve salts by the application of heat, but to demonstrate that some of these powders could be fused by heat. One experiment did not run as smoothly as usual. When he applied heat in the form of a lighted match to a particular kind of powder (gun powder) the result was almost fatal. A few hours after the flash, his eyes were sealed tight, his hair gone, and his whole face, ears and scalp "a crusted mass of skin and flesh." There were anxious days for the family, with his eyesight in question for many weeks. Fortunately, recovery was complete. This experience left an indelible imprint, a determination to learn more about chemical reactions and how to control them. So, that it would appear that the student was already conditioned for conversion to the profession of chemistry before he and Dr. Palmer became acquainted.

After graduation, Dr. Whitaker spent four years as instructor in applied chemistry at Columbia, during

the last three of which he was Prof. Chandler's private assistant. Also during this period, the University of Colorado granted him the M.S. degree. Through Dr. Chandler, he obtained his first industrial position as chemist for the Welsbach Company. His advancement from chemist was almost immediate, and in less than two years he had become general superintendent in charge of production and research. During this time he improved Welsbach's manufacturing processes and methods in almost every area.

It was when he was called back to Columbia in 1910 to become professor of industrial chemistry and chemical engineering, at the time Dr. Chandler retired, that Dr. Whitaker began a period of unusual service to his profession. Columbia's course then, as in the case of many of our prominent universities and technical schools, was not much more than a lecture and classroom course in industrial chemistry. But things soon began to happen in the basement of Havemeyer Hall at Columbia. Tanks, filterpresses, pumps, centrifuges, stills and distillation equipment appeared and were installed as rapidly as possible. Columbia became recognized as a school which gave excellent training in chemical engineering and Whitaker was the father of this development. Recognition came soon from his Alma Mater in the form of an LL.D. degree (1913), followed two years later by the degree of Doctor of Chemical Engineering from the University of Pittsburgh.

It was during this busy period that Dr. Whitaker took on a heavy extra-curricular job, the editorship of the *Journal of Industrial & Engineering Chemistry* of the American Chemical Society, where he again made a basic contribution to the advance of the chemical profession. This struggling journal, only two years of age, had the benefit of his leadership for the next five years and he both improved its quality and put it on a paying basis. Those years at Columbia must have been happy ones for all concerned. He was an extremely popular teacher, although somewhat unorthodox, I am told. It is said that it was almost "heretical" to cut one of his lectures, and a number of his former students testify that the lectures were always good, never stereotyped and often devoted to a subject completely unrelated to the day's assignment. If there were labor difficulties aired in the current press, the entire period might be given to a discussion of labor-management relations, with the less urgent topic postponed. He realized so well that the success of his students depended on their attitudes, ethics, and ability to get along with their associates, and these subjects often came up for discussion.

In 1917, after having made great

contributions to Columbia's reputation as one of the leading schools for chemical engineering, Dr. Whitaker again showed his interest in "beginnings." He left Columbia in order to participate directly in war work and took over the management of a chemical company which was manufacturing chemicals for the war and which later became the U. S. Industrial Chemical Co. and a part of U.S.I. He served as president of U.S. Industrial Chemical and as vice president of research and production of U.S.I. until 1927.

Then Dr. Whitaker left U.S.I. to become a highly successful consulting chemical engineer. Like other periods in his life, he had arrived at a point which to many would appear to be the end of a brilliant career, but to him was only the start of another phase. As a matter of fact, three years later he accepted the fresh challenge of shouldering the complex research and development programs of American Cyanamid Company at an age when most men are looking backward with satisfaction rather than forward with anticipation.

For the next seventeen years he was vice president and director of American Cyanamid, and after formally retiring in 1947, he has spent the last eight years as a consultant to the company. The usual definition of retirement has to be rewritten in his case.

There has never been a time in his long career that he has not been active in professional societies or in government work or as an advisor in the field of technical education. He aided the government in both World Wars, has been a member and officer of almost every technical society in America and has a record of unstinting cooperation as an advisor, member or consultant to boards and committees concerned with the problems of the chemical industry.

I can think of no better words than those of Dr. Little, when he said, "Men are sometimes distinguished for what they do and sometimes for what they are. More rarely are we permitted to honor them for both. Milton C. Whitaker is a chemist, who has earned distinction by his works, but he is first, last and all the time a man."

Presentation to Dr. Whitaker

DR. MILTON C. WHITAKER, retired vice president and consultant, American Cyanamid Company, New York, N. Y., was presented with Honorary Membership in THE AMERICAN INSTITUTE OF CHEMISTS at a meeting of the New York AIC Chapter, January 20, 1955, at the Hotel Commodore, New York, New York.

—C & E N

Dr. D. B. Keyes, AIC President; Kenneth C. Towe, President, American Cyanamid Co., and Dr. Whitaker.

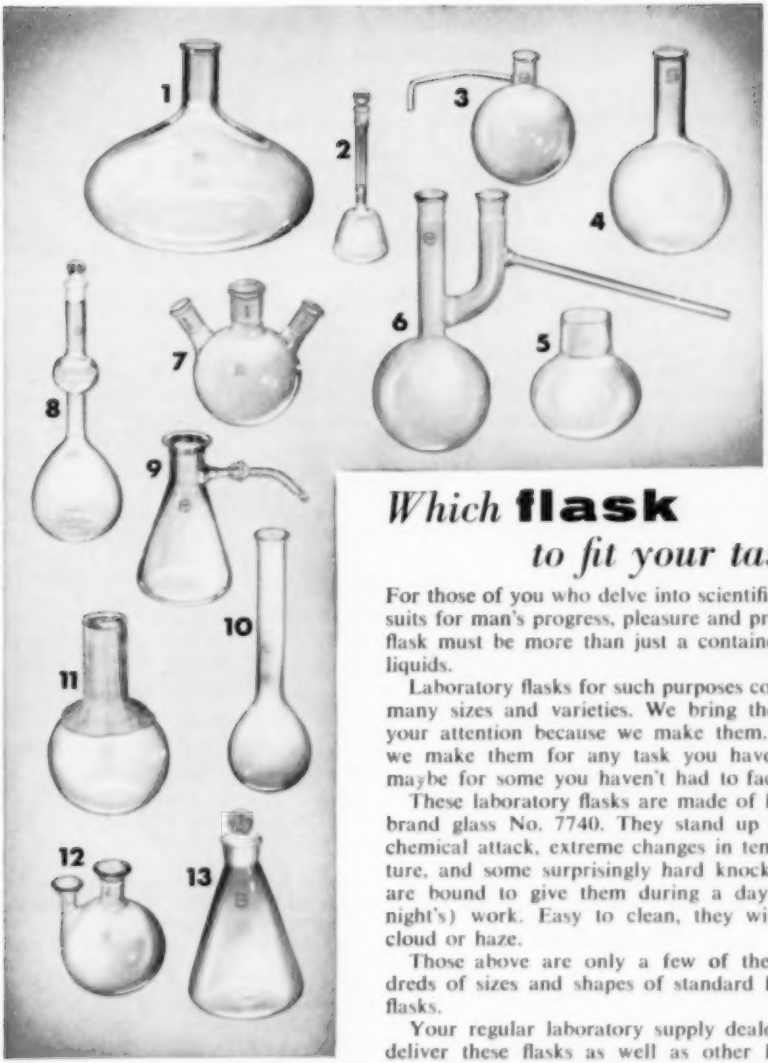
Dr. Wallace P. Cohoe, F.A.I.C., consultant, served as honorary chairman. The toastmaster was John Kotrady of the Texas Company, chairman of the New York Chapter. Dr. Robert C. Swain, vice president of American Cyanamid Company, introduced Dr. Whitaker, who was presented with the Honorary Membership Certificate by AIC president, Dr. Donald B. Keyes. Dr. Whitaker responded with an address entitled, "Watch Your Step." (See preceding pages.)

The citation to Dr. Whitaker reads:

To Milton C. Whitaker

For his intensely human qualities and services which have made him a dynamic force in the chemical profession for over fifty years; who as a teacher pioneered in developing modern curricula in chemical engineering, and as administrator applied the doctrine that sound research is industry's best insurance against obsolescence.

Moved: The New York offices of American Potash & Chemical Corporation to 99 Park Avenue, New York, N. Y.



1. 4422—Low form culture flask; 2. 5500—Sligh Oxidation Flask; 3. 4880—Brown-Duvel Moisture Test Flask; 4. 4060—Flat bottom vial mouth boiling flask; 5. 4440—Kolle type culture flask; 6. 4740 Claisen Distilling flask; 7. 4965—3-neck Distilling Flask $\frac{24}{40}$ joints; 8. 5760—Gilca Volumetric flask; 9. 5350—Filter flask with ball joint connection; 10. 5420—Flask for Kjeldahl determination; 11. 4220 — Wicker neck flask for wash bottle use; 12. 4970—2-neck Distilling Flask, socket joints; 13. 5020—Stoppered Erlenmeyer Flask.

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Food For the Future

One of the promising possibilities for increasing the world's food supply to match the population growth is the large-scale culture of miscroscopic algae, according to Dr. Austin W. Fisher, Jr., F.A.I.C., of Arthur D. Little, Inc., who will speak before the New York Chapter meeting on April 28th. Student medals will be presented to outstanding chemistry students of the New York area at this meeting.

Dry algae has been demonstrated to be a good food for animals, and offers promise as a supplementary human food. Active work in Japan indicates the possible adoption of algae as a food in the near future. Dr. Fisher directed a pilot plant study of algae cuture in which eighty pounds of dry algae were produced for use in chemical and nutritional studies.

Stimulating the Creative Mind

Dr. Henry B. Hass, F.A.I.C., president of Sugar Research Foundation, Inc., New York, will speak on "Stimulating the Creative Mind," when he receives the Honor Scroll of the New York Chapter on June second, at the Annual Meeting of the

Chapter at the Hotel Commodore, New York, N. Y.

Dr. Hass sees hope in the fact that the conditions necessary for creative thinking appear to be more compatible with our way of life than with totalitarianism. His theme will develop the idea that these conditions include freedom of dissent and respect for new ideas even if they appear foolish. They include dissatisfaction with things as they are and a willingness to undertake the hard work required for understanding a problem thoroughly. Other important factors are the mental habit of rearranging ideas into new patterns, and contact with creative people.

Honorary chairman at the meeting will be Dean Raymond E. Kirk of Polytechnic Institute of Brooklyn. John Kotrady, chairman of the New York Chapter, will present the honor scroll. A reception at 6:00 p.m. will be sponsored by the Sugar Research Foundation. Tickets for the dinner are $8.00, if reservations are made in advance with Shepherd Stigman, 29 W. 15th St., New York 11, N. Y. (WA 4-8800). There will be a surcharge for tickets purchased without reservation. Dress is optional.

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Dr. James B. Allison

Dr. Northey to be Honored

At the meeting of the New Jersey Chapter, May 5, 1955, at the Military Park Hotel, Newark, N. J., the 1955 Honor Scroll of the Chapter will be presented to Dr. E. H. Northey, F.A.I.C., special assistant to the director of laboratories at Pearl River, American Cyanamid Co., New York, N. Y. Dr. Raymond E. Kirk, F.A.I.C., dean of the Graduate School, Polytechnic Institute of Brooklyn, will speak in behalf of Dr. Northey. Dr. Northey's acceptance talk is entitled, "Some Problems of Chemists in a Growth Industry."

Student medals will presented to outstanding students of chemistry in the New Jersey Chapter area.

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Dr. Charles D. Flory of Rohrer, Hibler and Replogle, Personnel Consultants, will deliver the guest lecture, on "The Gears Can't Mesh When the Wheels Spin."

Please make reservations with the secretary of the Chapter, Dr. Sullivan, telephone NUtley 2-5000.

Chicago Chapter

Chairman, Dr. Lloyd A. Hall
Vice Chairman, Dr. Harold M. Coleman
Chairman-elect, Clifford A. Hampel
Secretary, John Krc, Jr.,
Armour Research Foundation
10 West 35th St.
Chicago 16, Illinois
Treasurer, Albert S. Henick
National Council Representative,
Dr. Gustav Egloff

The Newsletter of the Chicago Chapter

The Chicago Chapter has begun the publication of a *Newsletter* to keep its members informed of activities. The Newsletter Committee consists of Dr. H. M. Coleman

as chairman; E. Field of Standard Oil Co., and R. G. Maguire of Armour Research Foundation. Dr. Lloyd A. Hall, chapter chairman, writes the "Greetings" in this first issue:

"A 'news' baby has been born — a Chicago Chapter AIC Newsletter — which we hope you will nourish with kindness and friendship. We wish for it health and happiness and growth to successful and valuable adulthood through the diligent care and upbringing of all who are relatives (members of the AIC of course).

"We want to know some of the interesting transactions of the Chicago Chapter AIC. The *Newsletter* will carry summary information on council programs, how your dues are spent, new members — in brief, keep you up-to-date on Chapter activities. To do these things, we will need your personal help.

"It is our anticipation that your interest in your Chapter will be increased particularly in respect to regular attendance and participation at meetings, prompt payment of local dues, referring of new member prospects, interesting items for publication in the *Newsletter*, and any practical ideas you may have on improving the AIC.

"The *Newsletter* is your 'mouthpiece'. Help it learn to talk."

The following items of general interest are abstracted from the first issue of the Chicago Chapter *Newsletter*:

What Committees Are Doing

Larry Berman's College Liaison Committee staged a successful meeting at De Paul University on March 18th, at which "what the Professional Society Does for You" was discussed. Dr. R. Burtner of G. D. Searle & Co., spoke about the American Chemical Society. Mr. A. Henick of the Quartermaster Food & Container Institute discussed the AIC, and Mr. A. Blake of International Harvester Co., presented the story of the Chicago Technical Societies Council . . .

The Membership Committee, headed by Miss Mignon Gill, reported eighteen new members . . .

What Members are Doing

Mr. C. E. Thorp, manager, Department of Chemistry and Chemical Engineering of Armour Research Foundation, has organized and introduced a Research Administration Workshop Seminar which has as its objective the training of personnel for research management . . .

The Role of the Research Scientist

The Chicago Chapter will meet April 12th, to hear Dr. Haldon A. Leedy, vice president and director of Armour Research Foundation, discuss "The Role of the Research Scientist in Our Economic Future."

Today's high standard of living is in large part the result of the work of our research scientists and engineers, but serious threats to continued prosperity and national defense lie ahead . . . We're simply not producing enough scientists and engineer graduates. The U. S. has 600,000 scientists; 200,000 engineers. Russia has 500,000 scientists; 150,000 engineers. But in the past two years the num- of U. S. engineering graduates has dropped over thirty per cent, while Russian counterparts have doubled in number. The picture has its brighter side too. Dr. Leedy is optimistic about our steadily increasing productivity and manpower output . . . Industry is willing to invest in research and development, expansion of capital facilities, trial and exploitation of new production methods. Furthermore management recognizes the need for a humanitarian attitude toward employees if greatest output is to be attained.

Student medal awards to outstanding students in the area will be awarded at this meeting, to be held in the Chicago Engineers Club.

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Ohio Chapter

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Chairman-elect, Malvern J. Hiler
Secretary-Treasurer, Harold M. Olson
Harshaw Chemical Co.
1945 E. 97th St., Cleveland, Ohio
National Council Representative,
Guy A. Kirton

Annual All-Day Meeting

The Ohio Chapter holds its annual all-day meeting on April 15th this year, with headquarters at the Mayflower Hotel, Akron, Ohio. At 8:00 a.m. a trip is scheduled through the Limestone Mine of Columbia-Southern Chemical Co., Barberton, Ohio. Informal luncheon at the Mayflower Hotel is followed by the annual business meeting. Dr. Ray P. Dinsmore, AIC president-elect, speaks on "Professional Attitudes" at 3:45 p.m. At 6:00 p.m. an informal reception and dinner is scheduled for Dr. William J. Wohlleben, F.A.I.C., who receives the Chapter's 1955 Ohio Award. He will be introduced by Dr. David M. Gans, Chapter Chairman. Dr. Dinsmore will bring greetings from the National Council.

Western Chapter

Chairman, Dr. Kenneth W. Newman
Chairman-Elect, Thomas J. Rollins
Vice Chairman, Gerald I. Gruber
Treasurer, Dr. Frederick G. Sawyer
Co-Secretaries, Alfred J. Webber
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Los Angeles 21, Calif.
Thomas J. Kehoe
921 So. Washington Ave.
Fullerton, Calif.
National Council Representative,
Dr. Roger W. Truesdail

Air Pollution

The Los Angeles air pollution problem was the lively subject of a dinner meeting which featured a panel of experts on all phases of the subject. The principal speaker, Smith Griswald, outlined the plans for future action in combating smog. As assistant county manager and acting asistant head of the Air Pollution Control District, Mr. Griswald provided much material on abatement problems which were then discussed by a panel of experts comprising the following: Vance N. Jenkins, supervisor of the Research Division of Union Oil Company of California; Robert Lynch, assistant counsel of Los Angeles County; Dr. Glenn W. Todd, biochemist with the University of California Agricultural Experiment Station; Capt. Lewis J. Fuller, director of enforcement, Los Angeles County, and Fred G. Runyon, editor of the *Pasadena Independent.*

Each of the panel members discussed Los Angeles smog as it relates to his position and interest. The industrial, legal, enforcement, agricultural, and private citizen viewpoints gave rise to spirited discussion. In summary, smog is a growing problem which requires increased efforts on the part of scientists, cooperation of industry, and intelligent enforcement policies. Although air pollution is a major problem in Los Angeles, much of the information developed in this area will be useful as applied to other pollution centers of the world. The experts were optimistic in feeling that the problem can be solved but only by diligent community effort coupled with the expenditure of large sums of money and intelligent leadership.

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Washington Chapter

President, Paul E. Reichardt
Vice President, Dr. Frank Gonet
Treasurer, Albert F. Parks
Secretary, T. Allan Davis
1016 Urell Place, N.E.
Washington 17, D. C.
National Council Representative,
Paul E. Reichardt

Dr. Blum to Speak

The April 12th meeting of the Chapter will be held at O'Donnell's Restaurant, Washington, D. C. at 12:15 p.m. Dr. Wil-

liam Blum, Hon. AIC, who was chief of the Electrochemical Division of the National Bureau of Standards for about forty years and was assistant chief chemist at the time of his retirement, will give an illustrated talk on a lecture trip to Australia. Dr. Blum received the first Gold Medal of THE AMERICAN INSTITUTE OF CHEMISTS, which was presented to him in 1926.

March Meeting

The Chapter met March 8th at O'Donnell's Restaurant for luncheon. The chairman welcomed Messrs: A. P. Mathers, I. Pro, and Robert Watson, as new members of the AIC.

Several years ago the Chapter developed a series of job specifications and classifications for government chemists and transmitted them to national AIC headquarters for review and action. National headquarters advised that the Civil Service Commission has resumed work on these classifications. Messrs. J. F. Williams, chairman, F. S. Magnusson and A. P. Mathers were appointed as a committee to follow this work and to recommend their findings to the Washington Chapter for transmittal to national headquaters.

Mr. Reichardt appointed the following subcommittee to present a slate of nominees for election of officers at the May meeting: Messrs. W. E. Bailey, chairman, Frank Gonet and Arthur Schroder.

The scheduled speaker, Dr. W. Edwards Deming, was unable to attend the meeting. We were fortunate to have Dr. George Vlases of the Bureau of Customs, Baltimore, Md., who spoke on statistical analyses and sampling as applied to the chemical work of the Customs Bureau. Interesting practical examples of standard deviations of both sampling technique and chemical analysis with their relation to costs were cited.

Pennsylvania Chapter

Chairman, Dr. Robert Kunin
Secretary- Treasurer, John H. Staub,
Barrett Division
Allied Chemical & Dye Corp.
Margaret & Bermuda Sts.
Philadelphia 37, Pa.
National Council Representative,
Marcus Sittenfield

Women in the Chemical Profession

Dr. Mary Willard, F.A.I.C., of the Department of Chemistry of the Pennsylvania State University, will speak on "Women in the Chemical Profession" at the April 7th meeting of the Chapter, at the Engineers Club, Philadelphia, Pa.

May Meeting

The Annual Meeting of the Chapter will be held on May 5, 1955, at the Engineers Club, 1317 Spruce St., Philadelphia. The election of officers for the coming year will be announced and the business meeting will be held.

The speakers will be Warren Thompson of the Department of Licenses and Inspections and P. W. Purdom of the Division of Air Pollution Control of the City of Philadelphia, who will discuss "The Responsibility of the Chemical Profession to the Community." Dinner is scheduled for 6:30.

For reservations: Dr. John Bohrer, Internation ResistanceCo., 401 N. Broad St., Philadelphia 8, Pa. (WA 2-2166).

Will You Come

Apr. 7, 1955. Pennsylvania Chapter. Dinner. Engineers Club, 1317 Spruce St., Philadelphia, Pa. Speaker: Dr. Mary Willard, F.A.I.C., Dep't of Chemistry, The Pennsylvania State University, "Women in the Chemical Profession."

Apr. 12, 1955. Chicago Chapter Engineers Club. Dinner. Student Medal Presentations. Speaker: Dr. Haldon A. Leedy, vice president and director, Armour Research Foundation, "The Role of the Research Scientist in Our Economic Future."

Apr. 12, 1955. Washington Chapter. Luncheon. O'Donnell's Restaurant, Washington, D.C. Speaker Dr. William Blum, Hon. AIC. Illustrated talk on trip to Australia.

April 13, 1955. National AIC Council and Board of Directors. The Chemists' Club, 52 East 41st St., New York 17, N. Y. Dinner 6:00 p.m.

Apr. 15, 1955. Ohio Chapter. All-day meeting. Morning: Plant trip to Limestone Mine of Columbia-Southern Chemical Co., Barberton, Ohio. Luncheon, Mayflower Hotel, Akron, Ohio. Annual Business Meeting. Speaker, Dr. Ray P. Dinsmore. Reception and dinner to Dr. William J. Wohlleben, F.A.I.C., of the University of Dayton, who receives the 1955 Ohio Award.

Apr. 28, 1955. New York Chapter. The New York Times Dining Room, 229 W. 43rd St., New York, N. Y. Dinner 6:00-7:30 p.m. Presentation of Awards to Student Medalists. Speaker Dr. A. W. Fisher, Jr., Arthur D. Little, Inc., "Algæ as a Potential Future Source of Food." Question and answer period. Presiding chairman, John Kotrady. Reservations ($2.75), Shepherd Stigman, Foster D. Snell, Inc., 29 W. 15th St., New York 11, N. Y.

May 5, 1955. New Jersey Chapter. Dinner, Military Park Hotel, Newark, N. J. Award of 1955 Honor Scroll to Dr. Elmore H. Northey. Speakers: Dr. Raymond E. Kirk, F.A.I.C., Dean of Graduate School, Polytechnic Institute of Brooklyn, in behalf of Dr. Northey; Dr. Charles D. Flory, Personnel Consultant, Rohrer, Hibler & Replogle, on "Creative Thinking." Medal Awards to outstanding students. For Reservations: Dr. W. R. Sullivan, Hoffmann-La-Roche, Inc., Nutley, N. J. (NUtley 2-5000).

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May 5, 1955. Pennsylvania Chapter. Dinner 6:30 p.m. Engineers Club, Philadelphia, Pa. Annual business meeting. Speakers: Warren Thompson, Dept. of Licenses & Inspections, and P. W. Purdom, Div. of Air Pollution Control, City of Philadelphia, "The Responsibility of the Chemical Profession to the Community." Reservations: Dr. John Bohrer, International Resistance Co., 401 N. Broad St., Philadelphia 8, Pa. (WA 2-2166).

May 11, 1955. National AIC Council and Board of Directors. The LaSalle Hotel, Chicago, Ill. Dinner 6:00 p.m.

May 11, 12, 13, 1955. AIC Annual Meeting. LaSalle Hotel, Chicago 2, Ill. (See page 117)

June 2, 1955. New York Chapter. Honor Scroll Dinner. Hotel Commodore, New York 17, N. Y. 6:00 p.m., Cocktails, courtesy The Sugar Research Foundation. 7:00 p.m. Dinner. Hon. Chairman, Dr. Raymond E. Kirk, F.A.I.C. Chairman, John Kotrady, Introduction of Dr. Henry B. Hass, F.A.I.C., by Dr. G. Bryant Bachman of Purdue University. Presentation of Honor Scroll to Dr. Hass, John Kotrady. Acceptance, "Stimulating Creative Thinking," Dr. Hass. Reservations: (Dinner $8.00) Shepherd Stigman, Foster D. Snell, Inc., 29 W. 15th St., New York 11, N. Y. (WAtkins 4-8800).

May 9, 10, 11, 1956: AIC Annual Meeting. Hotel Statler, Boston, Mass.

Opportunities

Doris Eager, M.A.I.C.

AIC members who are seeking positions may place notices in this column without charge.

Chemists Available

Research Administrator, Ph.D. organic chemistry, presently employed as director of organic research with medium-sized company manufacturing industrial and fine chemicals. 15 years responsible experience. Age 36. Desires position in research supervision, management or technical service. Box 40, THE CHEMIST.

Professorship or Research Director: F.A.I.C., B.S. in Ch.E., Ph.D. physical chemistry. 14 years chemistry and chemical engineering teaching and academic research; 11 years industrial research and chemical engineering development. Specialized experience in atomic energy, explosives, jet propulsion, combustion, electrochemistry, corrosion. Publications, Patents. Desire professorship or challenging position in research administration. Box 42, THE CHEMIST.

Administration or Sales. 37, M.S. (Chemical Economics), F.A.I.C. Quadrupled efficiency of analytical laboratory, directed multi-plant expansion program which tripled dyestuff output; sold surplus chemicals which had been regarded unmarketable. Experienced writer and speaker. Prefer South, but will consider any location. Box 44, THE CHEMIST.

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Chemical Engineer. 13 years varied experience. Laboratory administration, production supervision. Polymers, metal finishing. Writing. Liaison work between production and management. Box 400, THE CHEMIST.

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Positions Available

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Assistant Research Director. Chemist or chem. Eng., Ph.D., 30-40 years old. Position involves administration. Previous experience may be varied instead of specific. Salary commensurate with experience. Metropolitan New York area. Box 43, THE CHEMIST.

Assistant to Vice President and General Manager, to assume responsibilities of top management. Prefer Ph.D. in organic chemistry; knowledge of organic chemical

dyestuffs and intermediates. Should have had successful plant management experience, familiar with purchasing, accounting, labor relations, selling and general business methods. Age 40 to 50. Salary up to $25,000 to start; benefit plans in effect. Box 45, THE CHEMIST.

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Air Pollution Symposium: To be held April 18-20 at the Huntington-Sheraton Hotel, Pasadena, Calif., co-sponsored by Stanford Research Institute, California Institute of Technology, University of Southern California, University of California at Los Angeles, Southern California Air Pollution Foundation and the Air Pollution Control Association of Pittsburgh.

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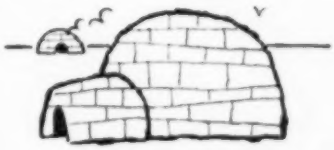

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Chemical Progress Week Slated for May 16-21

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Chemical Progress Week, Manufacturing Chemists' Association, Washington 6, D.C.

Last year the Manufacturing Chemists' Association decided to sponsor the first "Chemical Progress Week" as part of its continuing public relations program for the industry. As originally conceived, the program was to be pilot-plant in nature with emphasis on those areas throughout the country with a heavy concentration of chemical industry. The program, however, was picked up by the men and women of the chemical industry and developed into a full-scale national program.

With the theme of, "A Better America Through Chemical Progress" the purpose of Chemical Progress Week was to bring home to as many of the American people as possible, the significance of chemistry and the products of chemistry in terms of daily life.

The enthusiastic acceptance of the industry overcame in large measure the handicap of time. The total results far exceeded original expectations. Programs in hundreds of communities throughout the country produced the following:

Speeches: 1006 speeches before 115,720 people.

Newspapers: 1440 CPW stories in 915 newspapers and magazines.

Television: 219 appearances on 134 TV stations.

Radio: 504 programs or announcements on 222 stations.

Advertisements: 261 ads in 207 newspapers with a combined circulation of over 7-million.

Plant Visits: 235 with 34,935 visitors.

Literature: 217,200 pieces of CPW literature and 24,658 pieces of company literature were distributed.

Posters: 20,947 CPW posters were used on plant and school bulletin boards, and in connection with special displays.

Exhibits: At least 76 special exhibits were prepared.

Metered Mail: 152 CPW postage meter slugs were used on more than 2-million pieces of mail.

Proclamations: 165 CPW proclamations were issued, including 21 by state governors.

CPW events also included many essay contests, poster contests, and other special activities.

Preparations for the second CPW program scheduled for May 16-21,

(continued on page 150)

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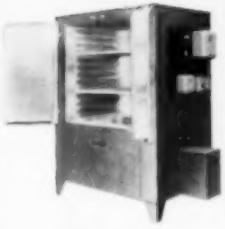

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1955, were begun last Fall. Following the same theme and general modus operandi, over 1000 industry representatives throughout the United States have been designated to serve as CPW representatives. In communities with more than one chemical plant, committees have been formed. Complete kits of materials were distributed in mid-March. The cooperation of associated groups was enlisted. In the profession, both the American Chemical Society and the American Institute of Chemical Engineers are actively participating. In the industry many other trade groups such as National Fertilizers Association, National Agricultural Chemicals Association, American Plant Food Council and the Society of the Plastics Industry are joining with the MCA in implementing the CPW effort. Both the U. S. Chamber of Commerce and the National Association of Manufacturers are lending active support.

One outstanding feature of the upcoming Chemical Progress Week, according to William C. Foster, MCA president and chairman for CPW, is an increased effort toward cooperation with educational groups. Keenly aware of the technical manpower shortage and the need for a continuing supply of scientifically trained personnel, the MCA through "Chemical Progress Week" career guidance seminars, speeches and essay contests, hopes to help bring home to the student, the teacher and the vocational guidance counselor the advantages of a technical or scientific career.

It appears that CPW in 1955 will be bigger, better, and more effective than last year's effort. The MCA explains that it "holds no copyright" on Chemical Progress Week and any individual or organization who wants to participate is welcome. Inquiries should be addressed to Chemical Progress Week National Headquarters, Room 204, 1625 Eye St., N.W., Washington 6, D.C.

Communications

Suggested Readings

To the Editor:

The theme, "Working with People", of the 1955 Annual Meeting in Chicago, inspires me to suggest six recent books as mental preparation for those who will attend the sessions. (They will be helpful to those who must stay at home, too!)

Human Relations in Supervision, W. E. Parker and R. W. Kleemeier, 1951, 375 pp. $5.00.

Psychology, W. J. Pitt & J. A. Goldberg, 1954. 414 pp. $4.50.

Personnel and Industrial Psychology, E. E. Ghiselli & C. W. Brown, 1954.

The Psychology of Thinking, W. E. Vinacke, 1952. 367 pp. $6.00.

Dynamics of Human Relations, R. W. Wetherill, 1949. 3 Vols. $9.45. Vol. I, "How to Succeed with People," 356 pp. $3.75. Vol. II, "How to Put your Ideas Across," 345 pp. $3.75. Vol. III, "How to Get Leadership and Influence," 353 pp. $3.75.

Principles of Human Relations Applications to Management," N. R. Maier, 1952. 474 pp. $6.00.

(All of these can be purchased from Technical Books of America, 597 Fifth Ave., New York 17, N. Y. Attention: John Sheridan.)

—John Kotrady, F.A.I.C.
New York, N. Y.

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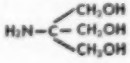

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Thursday, May 12th

	Amount	Number	Total
Advance registration for AIC Members ...	$3.00	——	——
(This registration must be paid before the day of the meetings, as registration at door will be $5.00.) (There is no registration fee for wives of registrants.)			
Advance Registration for Non-Members ..	$5.00	——	——
(This registration must be paid in advance, as registration on the day of the meeting will be $6.00.)			
Registration for Students	$1.00	——	——
Coffee Hour	no charge	——	
Ladies Tour (Complimentary Luncheon) ..	$1.75	——	——
Informal Luncheon	$3.50	——	——
Gold Medal Dinner	$5.25	——	——

Friday, May 13th

Coffee Half-hour	no charge	——	
Cocktails at Luncheon Reception	no charge	——	
Honor Recipients' Luncheon	$3.50	——	——

Check is enclosed for total amount of..... $——

Signature .....

Address .....

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How Celite Mineral Fillers make a product free-flowing . . .

Keeping fertilizers "On the run"

REALIZING their product is one that cannot "cake-up" and still survive in a competitive market, leading producers of fertilizer use one of the Celite Mineral Fillers as a standard "anti-caking" ingredient.

The ability of Celite Fillers to keep a product free-flowing results from their high absorption properties and unique diatom structure—properties which make them unusually effective safeguards against caking in deliquescent materials. They are two of the unusual physical characteristics that adapt these diatomaceous silica powders to numerous industrial uses.

CHECK LIST OF PRODUCT BENEFITS OBTAINABLE AT LITTLE COST WITH CELITE MINERAL FILLERS

- Added Bulk
- Better Suspension
- Faster Cleaning Action
- Greater Absorption
- Improved Color
- Better Dielectric Properties
- More Durable Finish
- Increased Viscosity
- Elimination of Caking
- Higher Melting Point
- Better Dry Mixing
- Improved Dispersion

THESE CELITE PROPERTIES BENEFIT MANY TYPES OF PRODUCTS

Because of their inertness and great bulk per unit of weight, Celite Mineral Fillers make ideal bulking agents for powders and pastes. Their tiny multi-shaped particles interlace to stiffen and strengthen admixtures. The microscopically small facets of these particles diffuse light so effectively that they can be utilized to impart any desired degree of flatness to a surface film. Their light, porous nature improves suspension, helps prevent segregation. And their porous, thin-walled cellular structure imparts a delicate non-scratching abrasive action.

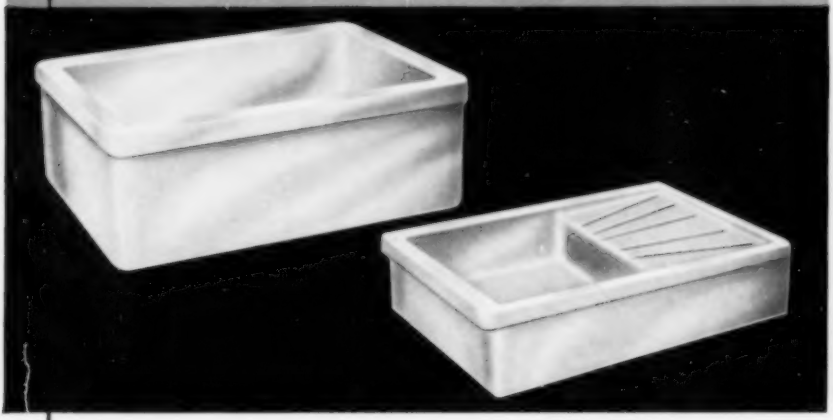
You may find Celite the "extra something" needed to lift your product above competition. Why not discuss its application to your problem with a Celite engineer? Or write for further information and samples to Johns-Manville, Box 60, New York 16, N. Y. In Canada: 199 Bay St., Toronto, Ont.

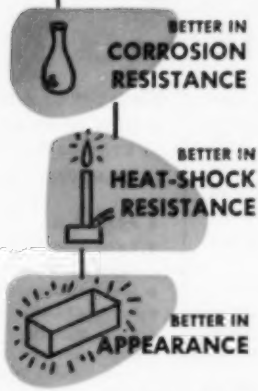
Johns-Manville CELITE®

MINERAL FILLERS

Without a doubt . . .

the finest Laboratory Sinks made today!





See your Laboratory Furniture Dealer or write direct for a copy of Bulletin L-8.

This sink is solid chemical porcelain, as thoroughly corrosion-resistant as the porcelain crucibles and dishes the chemist uses . . the only sink made today which possesses practically universal chemical resistance.

It is a beautiful sink. Trim in design, with smooth, rounded corners, inside and out. Its lustrous, blue-gray glaze is an integral part of the porcelain body — can never peel or flake off, and is as easy to clean as a china dish.

It possesses superb heat-shock resistance — and will withstand any heat shock encountered in laboratory usage.

Superior to stone, superior to porcelainized steel, superior to sanitary ware, "U. S." gray-glazed chemical porcelain sinks are rapidly becoming the first choice of laboratories everywhere.

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